April 2005

1

Black Ice Software

Developer Newsletter

Volume 10 Issue 4

Inside this issue:

Restrict which applications can print to the Black Ice Printer Drivers

Encoding Binary
Data with the Black
Ice 2D Barcode
Toolkits

Black Ice Printer Drivers - Maintain the same input and output filenames

Installing and Configuring Brooktrout TR1034 Fax Boards on Windows 2003



BLACK LCF NEWSLETTER is published by Black Ice Software, Inc. contents of this newsletter in its entirety are Copyright © 2005 by Black lce Software, Inc. Route 101, Salzburg Square, Amherst, NH 03031, USA. Black Software, Inc. does hereby permission to reproduce material contained in this newsletter, provided credit is given to the source, and a copy of the publication that the material appears in is sent to Black Ice Software at the above address.

Phone: (603) 673-1019 Fax: (603) 672-4112

E-mail:

sales@blackice.com

www.blackice.com

Restrict which applications can print to the Black Ice Printer Drivers

Take control of the Black Ice printer drivers by accepting print jobs only from specific applications.

The Black Ice printer driver just got better with a new feature which allows the driver to refuse any print jobs other than those coming from the developer's printing application. The restriction is made using a password. The printer driver will print jobs only from the application that "knows" the password. The password can be any string defined by the developer.

The Black Ice printer driver will scan the document name passed by the printing application for the presence of the password, i.e the \$MyPassword\$ string. If the password string is present in the document name, the files are generated, if the document name does not contain the password, the print job will be aborted.

Developers can integrate this feature into their applications which use the printer driver to ensure that no other application,

(Continued on page 2)

Encoding Binary Data with the Black Ice 2D Barcode Toolkits

The Black Ice Barcode Toolkits provide both DLLs and ActiveX controls which allow developers to encode and decode a wide variety of barcode symbols, including both ID and 2D symbologies. The 2D DataMatrix and the PDF 417 barcode symbols are capable of storing large amounts of information into a relatively small barcode symbol. In addition to stor-

ing ASCII values, both the PDF 417 and DataMatrix symbols are capable of storing binary data, such as images, documents or even applications.

One possible use for binary data encoding with a barcode symbol would be to store and encrypt sensitive information, such as patient re-



Original image, see page 2 for the generated barcode symbol

(Continued on page 2)

Black Ice Printer Drivers - Maintain the same input and output filenames

The Black Ice printer driver supports seven filename generation methods:

- Use the prefix and extension
- Prefix and extension from the registry
- Prefix and extension from the INI file
- Exact filename
- Exact filename from the registry
- Exact filename from the INI file
- Use the document name

In the past, the "Use the document name"

has created some confusion among our customers. Many developers, when printing programmatically to the Black Ice printer, would like to use the file name of the original printed document as the file name of the generated image file. This is not directly possible since printer drivers are not aware of the name of the file printed by the printing application. When a printer driver prepares the print job, the printing application can pass a string to the printer driver specifying the document name, but in most cases that

(Continued on page 2)

Hardware Installation Guide: Installing and Configuring Brooktrout TR1034 Fax Boards on Windows 2003, see page 3 for details...

(Restricting, continued from page 1)

such as Word, Excel, etc. can print to the Black Ice printer driver.

Real world scenario:

The new feature is very useful in situations where an application is developed to print data from a specific database to the Black Ice printer driver and then email to a destination or otherwise post process the printed images or PDF files. The application would check for the EndDoc message sent by the printer driver to process and email the created file. Lets assume that only files created and printed based on the database information should be emailed. In

the case that a user on the PC accidentally prints from Word, Excel or any other application to the Black Ice printer driver, this incorrect information would be printed, processed and sent by the developer's application.

Using the new password feature this scenario cannot happen, since Word will not put the password into the document name.

The new print job restriction functionality also ensures that end users aren't abusing the developer's application by simply taking advantage of the presence of a document conversion printer driver for use with other applications.

The password must be specified in the INI file for the printer driver, and such can be specified at install time or changed programmatically at any time:

[Settings]

Password=\$MyPassword\$

The password feature is not intended to be used to authenticate users. If you need a secure method to restrict printing only for a limited number of users, you can use the BiPlug-in feature. To read more about the BiPlug-in feature, visit

http://www.blackice.com/ Printer Drivers/Custom Plug In Support.htm

things:

April is here at

last, now we can

all look forward to

the following three

April Showers



Paying Taxes

(Barcodes, continued from page 1)

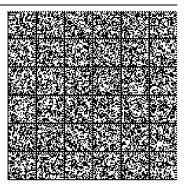
cords or even fingerprints. By encoding the data into a barcode symbol, the information can only be retrieved by detecting and decoding the barcode symbol. Using this approach can prevent prying eyes from accessing critical information.

Encoding data into barcode symbols can be used to pro-

tect information, however it is not intended to be a replacement for data encryption.

The Black Ice PDF 417 and DataMatrix toolkits support ASCII and Binary data encoding. Interested parties are encouraged to download an evaluation copy of the toolkits from the Black Ice website:

http://www.blackice.com/barcode.htm



The generated DataMatrix barcode symbol

3. The Month of May

		Ma	y 20	05		
Sun	Мо	Tue	We	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	П	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

(Filenames, continued from page 1)

is not the same as the actual file name. For example if Word prints a file called test.doc, the document name passed by Word to the printer driver will be "Microsoft Word – test.doc". But there is hope! Using the BlackIceDEVMODE.dll or BlackIceDEVMODE.ocx controls, developers can solve this issue in a few steps.

 When printing is done automatically, the printing application knows the name of the file which is going to be printed. Before printing, the application must read the name of the source file.

2. Once you have the name of the source file, use the BlackIceDEVMODE.dll or BlackIceDEVMODE.ocx controls to change the filename generation method to "Use exact filename" and set the output file name using the SetImageFileName() function to the desired file name. Cutting the extension of the original file, and replacing it with the file extension for the cur-

rent file type can create the desired file name. Use the GetFileExtension() function to get the current file extension for the currently used file format.

Using these simple steps it is possible to create images having the source document's name. The latest Black Ice Printer Driver RTKs includes a simple sample application which demonstrates the above steps and can be used as a starting point for implementing this functionality in your own application.

Installing and Configuring Brooktrout TR1034 fax boards on Windows 2003

Windows 2003 includes built in Brooktrout drivers which are of a different version than those supported by the Black Ice Fax C++/ActiveX or Impact Fax applications. In order to install and utilize a Brooktrout TR1034 on a Windows 2003 Server, you should perform the following steps:

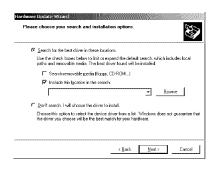
- I. Insert the Brooktrout board and boot the system.
- 2. When the Found New Hardware Wizard appears click No, not this time and click Next as shown below.



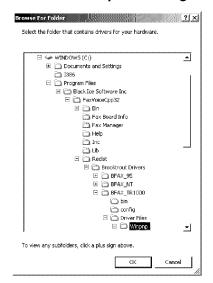
3. On the next screen, click Install from a list or specific location (Advanced) and click Next.



4. Next, check **only** the **Include this location in the search**: check box and click the **Browse** button.



5. When the **Browse** dialog appears, find the **BFAX_TRI000/Driver Files/Winpnp** directory in the Black Ice products root folder. Click **OK** to close the **Browse** dialog and click **Next** on the **Hardware Update Dialog.**



6. If a **Security Alert** dialog appears as shown below, click **Yes**.



7. When the **Brooktrout Hardware** dialog appears click **No.**



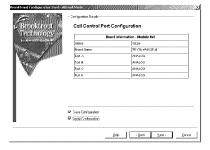
8. Click **Finish** to complete the driver installation.



9. Open My Computer and navigate to the BFAX_TR1000\bin folder in the Black Ice product directory (Program Files\Black Ice Software \PRODUCT-NAME \BFAX_TR1000\bin). Double click ConfigTool.exe. The Brooktrout Configuration Tool Wizard will appear as shown below.



10. Click **Next** to view the **System Report** and click **Next** again to select the Country and Protocol Options. Finally click **Next** after configuring the Country and Protocols to view the **Configuration Details** make sure to check the **Apply Configuration** check box and ensure that the **Save Configuration** checkbox is also checked. Click **Next.**



11. Finally, click **Finish** and your Brooktrout Board is configured.



Black Ice Software, Inc. 292 Route 101 Amherst, NH, 03031

603-673-1019 Phone: Fax: 603-672-4112 sales@blackice.com E-mail:

> **New Printer Driver Features: Restrict printing applications** and maintain the same input/output filename. More Inside...

Time to upgrade?



Latest Version Numbers

Printer Driv	046		For Voice and Im	ago T ool	lleite	
Product Product	Version	 Date	Froduct Version Date			
Printer Drivers for ME/98/95	5.71	3/10/05	Fax C++/ActiveX/COM	11.09	3/03/05	
Monochrome, Color, Metafile and PDF			Voice C++/ActiveX/COM	11.09	3/03/05	
Printer Drivers for XP/2000/NT Color, ColorPlus, Metafile, Monochrome	9.20	4/04/05	Tiff SDK/ActiveX/COM	10.33	2/22/05	
and PDF			Annotation SDK/ActiveX/COM	10.33	2/22/05	
Printer Drivers for 2003, Citrix and Termi- 9.20 4/04/05		4/04/05	Cover Page Generator SDK/ActiveX	10.33	2/22/05	
nal Servers Color, ColorPlus, Metafile, Monochrome			Image SDK/ActiveX	10.33	2/22/05	
and PDF			Document Imaging SDK/ActiveX	10.33	2/22/05	
			Barcode SDK/ActiveX	4.20	10/04/04	
Impact Produ	ıcts		Free Software			
Product Ve	ersion	Date	Impact ColorFax Lite	6.00	7/22/04	
Impact Fax Server 6.0	00	3/28/05	Tiff Viewer Plug-in - Free Version	6.00	7/22/04	
mpact Fax on Demand 4.0)6	12/01/00	ModemWeasel	2.00	8/01/02	
Impact Fax Broadcast 4.3	30	12/13/04	Internet Tools			
Impact ColorFax 6.00 7/22/04		7/22/04	Print2Email	4.00	2/14/05	
Drag and Drop Printing 2.0	00	12/24/02	Tiff Viewer Plug-in - Complete	6.00	7/22/04	
-			Print Monitoring Server	3.00	9/16/04	